### PATENT COOPERATION TREATY

REC'D 19 FEB 2007 WIPO PCT

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference		_			
689290.233	FOR FURTHER ACTION	See Form PCT/IPEA/416			
International application No.	International filing date (day/month/year)	Priority date (day/month/year)			
PCT/US04/42406	16 December 2004 (16.12.2004)	12.2004) 22 December 2003 (22.12.2003)			
International Patent Classification (IPC) or national classification and IPC					
IPC: C12Q 1/00( 2006.01); C07K 1/00 16/00 USPC: 435/4;530/350,387.1					
Applicant					
AVALON PHARMACEUTICALS, INC.					
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.					
2. This REPORT consists of a total of $\mathcal{L}$ sheets, including this cover sheet.					
3. This report is also accompanied by ANNEXES, comprising:					
a. (sent to the applicant and to the International Bureau) a total of sheets, as follows:					
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4. This report contains indications relating to the following items:					
Box No. I Basi	Basis of the report				
Box No. II Prio	rity				
	Ion-establishment of opinion with regard to novelty, inventive step and industrial pplicability				
Box No. IV Laci	of unity of invention				
	Reasoned statement under Article 35(2) with regard to novelty, inventive step or ndustrial applicability; citations and explanations supporting such statement				
	ain documents cited				
Box No. VII Cert	Certain defects in the international application				
Box No. VIII Cert	Certain observations on the international application				
Date of submission of the demand	Date of completion	of this report			
19 July 2005 (19.07.2005)	17 January 2007 (17.0	01.2007)			
Name and mailing address of the IPEA/ US	Authorized officer				
Mail Stop PCT, Attn: IPEA/US Commissioner for Patents	Laive Anh	1. D Roberts			
P.O. Box 1450 Alexandria, Virginia 22313-1450	Lei Yao Tell	icia D. Roberto			
Facsimile No. (571) 273-3201		72-3112			
Form PCT/IPEA/409 (cover sheet)(April 2005)					

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.	<del></del>
PCT/US04/42406	

Box No. I Basis of the report
1. With regard to the language, this report is based on:
the international application in the language in which it was filed.
a translation of the international application into <u>English</u> , which is the language of a translation furnished for the purposes of:
international search (under Rules 12.3 and 23.1(b))
publication of the international application (under Rule 12.4(a))
international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):
the international application as originally filed/furnished
the description:
pages 1-42 as originally filed/furnished pages* NONE received by this Authority on
pages* NONE received by this Authority on received by this Authority on
the claims:
pages 43-47 as originally filed/furnished
pages* NONE as amended (together with any statement) under Article 19
pages* NONE received by this Authority on
pages* NONE received by this Authority on
the drawings:
pages NONE as originally filed/furnished
pages* NONE received by this Authority on
pages* NONE received by this Authority on
a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. The amendments have resulted in the cancellation of:
the description, pages
the claims, Nos.
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):
This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
the description, pages
the claims, Nos
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):  If item 4 applies, some or all of those sheets may be marked "superseded."
rm PCT/IPEA/409 (Box No. I) (April 2005)

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Form PCT/IPEA/409 (Box No. V) (April 2005)

International application No. PCT/US04/42406

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1. Statement				
Novelty (N)	Claims	1-35	YES	
	Claims	NONE	NO	
Inventive Step (IS)	Claims	1-35	YES	
	Claims		NO	
Industrial Applicability (IA)	Claims	1-35	YES	
		NONE	NO	
2. Citations and Explanations (Rule 70.7)				
Claims 1-35 meet the criteria set out in PCT Article invention.	e 33(2)-(3) beca	use the prior art does not teach or fa	irly suggest the claimed	
Claims 1-35 meet the criteria set out in PCT Article an be made or used in industry.	e 33(4) and thus	have industrial applicability because	the subject matter claimed	
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#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/42406

Supplemental Box Relating to Sequence Listing
Continuation of Box No. I, item 2:
1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis of:
a. type of material
a sequence listing
table(s) related to the sequence listing
b. format of material
on paper
in electronic form
c. time of filing/furnishing
contained in the international application as filed
filed together with the international application in electronic form
furnished subsequently to this Authority for the purposes of search and/or examination
received by this Authority as an amendment* on
2. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:
If item 4 in Box No. I applies, the listing and/or table(s) related thereto, which form part of the basis of the report, may be marked superseded."